

APRIL/MAY 2024

**BEL61/CEL61 — TELEVISION AND VIDEO
ENGINEERING**

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. List the different colour picture tubes.
2. What is Vidicon?
3. What is PAL?
4. What is the function of deflection oscillator in TV system?
5. Expand : SECAM.
6. Mention few merits of SECAM system.
7. What is mean by U and V signal?
8. List the factor which influence the choice of sub-carrier frequency.
9. What is the difference between VCR and VTR?
10. What is remote control?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions.

11. (a) Explain with block diagram the function of silicon diode array vidicon camera.

Or

- (b) Explain the theory of scanning.

12. (a) Explain the television signal propagation.

Or

- (b) Explain block diagram of VHF tuner section.

13. (a) Write a short notes on PAL and NTSC system.

Or

- (b) What is the basic difference between the SECAM and other colour TV system? Explain.

14. (a) Explain PAL-D color receiver system.

Or

- (b) Discuss the factors which influence the choice of sub carrier frequency in a color TV system.

15. (a) Explain features of cable / satellite TV?

Or

- (b) List the merits of digital TV receivers that are not available in a analog receiver.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the composite video signal.

17. Discuss the television receiver.

18. Explain the terms :

- (a) Complementary colours
- (b) Additive mixing
- (c) Subtractive mixing

19. Explain the colour television camera.

20. Describe the video disc system.